AMENDMENTS TO THE CLAIMS

1. – 10. (Canceled)

11. (Previously Presented) A process for culturing mouse pluripotent stem cells, which comprises culturing the mouse pluripotent stem cells in a medium comprising leukemia inhibitory factor (LIF), an antioxidant and an inhibitor of adenylate cyclase activity, said process allowing the mouse pluripotent stem cells to proliferate or establish while maintaining the cells in an undifferentiated state.

12. (Canceled).

13. (Previously presented) The process according to claim 11, wherein the culture process is performed using a minimal culture medium.

14. (Previously presented) The process according to claim 11, wherein the pluripotent stem cells are ES cells.

15. (Canceled)

16. (Canceled)

17. (Previously Presented) A process for the preparation of a clonal population of undifferentiated mouse pluripotent stem cells, which comprises culturing the undifferentiated mouse pluripotent stem cells in a medium comprising leukemia inhibitory factor (LIF), an antioxidant and an inhibitor of adenylate cyclase activity.

18. (Previously Presented) A process for the preparation of a clonal population of undifferentiated mouse pluripotent stem cells, which comprises isolating undifferentiated pluripotent stem cells from a living body of a mouse, and culturing the undifferentiated mouse pluripotent stem cells in a medium comprising leukemia inhibitory factor (LIF), an antioxidant and an inhibitor of adenylate cyclase activity.

19. (Canceled).

20. (Previously Presented) The process according to claim 17, wherein the culture process is performed using a minimal culture medium.

21. (Previously presented) The process according to claim 17, wherein one pluripotent stem cell is cultured to provide a clonal population of the cells.

22. (Previously presented) The process according to claim 17, wherein pluripotent stem cells are cultured in a medium free of feeder cells or free of serum or free of both, to provide a clonal population of the cells, in which the pluripotent stem cells are seeded at a lower density than that which allows adjacent pluripotent stem cells to interact with each other, so as to induce the proliferation of undifferentiated pluripotent stem cells.

23. (Previously presented) The process according to claim 17, wherein one pluripotent stem cell is cultured in a medium free of feeder cells or free of serum or free of both, to provide a clonal population of the cells.

24. (Previously presented) The process according to claim 17, wherein the pluripotent stem cells are ES cells.

25. (Canceled)

26. (Canceled)

27. – 29. (Canceled)

30. (Previous presented) The process of claim 11, wherein the inhibitor of adenylate cyclase activity is selected from the group consisting of SQ22536 (9-(tetrahydro-2-furanyl)adenine), 2',5'-dideoxyadenosine, 9-cyclopentyladenine, 2',5'-dideoxyadenosine 3'-diphosphate, 2',5'-dideoxyadenosine 3'-monophosphate, and MDL-12,330A (cis-N-(2-phenylcyclopentyl)azacyclotridec-1-en-2-amine).

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Previously presented) The process according to claim 11, wherein the medium is free of feeder cells or of serum or free of both.

35. (Currently amended) The process according to claim 11, wherein the medium further comprises a second differentiation inhibitory factor~~,~~ and a serum replacement~~, and an antioxidant.~~

36. (Currently amended) The process according to claim 17, wherein the medium further comprises a second differentiation inhibitory factor~~,~~ and a serum replacement~~, and an antioxidant.~~

37. (Canceled)

38. (Canceled)

39. (Previously presented) The process of claim 11, wherein the antioxidant is 2-mercaptoethanol, the inhibitor of adenylate cyclase activity is SQ22536, and further comprising a serum replacement, KSR.

40. (Canceled)